6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2012-0510; FRL-9914-30-OAR]

RIN 2060-AR58

National Emission Standards for Hazardous Air Pollutants
Residual Risk and Technology Review for Flexible Polyurethane
Foam Production

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Flexible Polyurethane Foam (FPUF) Production source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, the EPA is finalizing amendments to correct and clarify regulatory provisions related to emissions during periods of startup, shutdown and malfunction (SSM); add requirements for reporting of performance testing through the Electronic Reporting Tool (ERT); clarify the leak detection methods allowed for diisocyanate storage vessels at slabstock foam production facilities; and revise the rule to add a schedule for delay of leak repairs for valves and connectors.

DATES: Effective date: This final action is effective on [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Compliance dates:

For the revised SSM requirements and electronic reporting requirements for existing FPUF Production facilities is [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

For the new requirements prohibiting the use of HAP ABAs for existing slabstock FPUF Production facilities is 90 days from the effective date of the promulgated standards, [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

New sources must comply with all of the standards immediately upon the effective date of the standard, [INSERT THE DATE OF PUBLICATION IN FEDERAL REGISTER], or upon startup, whichever is later.

ADDRESSES: The EPA has established a docket for this rulemaking under Docket ID No. EPA-HQ-OAR-2012-0510. All documents in the docket are listed in the http://www.regulations.gov index.

Although listed in the index, some information is not publicly available, e.g., confidential business information (CBI) or other information whose disclosure is restricted by statute.

Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in http://www.regulations.gov or in hard copy at the EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday

through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the EPA Docket Center is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Ms. Kaye Whitfield, Sector Policies and Programs Division (D243-02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-2509; fax number: (919) 541-5450; and email address: whitfield.kaye@epa.gov. For specific information regarding the risk modeling methodology, contact Mr. Chris Sarsony, Health and Environmental Impacts Division (C539-02), Office and Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-4843; fax number: (919) 541-0840; and email address: sarsony.chris@epa.qov. For information about the applicability of the NESHAP to a particular entity, contact Mr. Scott Throwe, Office of Enforcement and Compliance Assurance (OECA); telephone number: (202) 564-7013; and email address: throwe.scott@epa.gov.

SUPPLEMENTARY INFORMATION:

Acronyms and Abbreviations. The following acronyms and abbreviations are used in this document.

ABA auxiliary blowing agent

CAA Clean Air Act

CBI confidential business information

CED	a			D
CFR	Coae	OI	rederai	Regulations

EPA Environmental Protection Agency

ERT Electronic Reporting Tool
FPUF flexible polyurethane foam

FR Federal Register

HAP hazardous air pollutants

HQ hazard quotient

ICR information collection request

MACT maximum achievable control technology

MIR maximum individual risk

NAICS North American Industry Classification System
NESHAP National Emissions Standards for Hazardous Air

Pollutants

NRDC Natural Resources Defense Council

NTTAA National Technology Transfer and Advancement Act
OECA Office of Enforcement and Compliance Assurance

OMB Office of Management and Budget

PB-HAP hazardous air pollutants known to be persistent and

bio-accumulative in the environment

RFA Regulatory Flexibility Act

RTR residual risk and technology review

SBA Small Business Administration

SSM startup, shutdown and malfunction TOSHI total organ-specific hazard index

tpy tons per year

TTN Technology Transfer Network
UMRA Unfunded Mandates Reform Act

Background Information. On November 4, 2013 (78 FR 66108), the EPA proposed revisions to the FPUF Production NESHAP based on our RTR, and we also proposed to amend provisions related to emissions during periods of SSM, to add requirements for electronic reporting of performance testing, and to clarify certain rule requirements. In this action, we are finalizing revisions to the rule. We summarize some of the comments we

received regarding the proposed rule and provide our responses in this preamble. A summary of the public comments on the proposal not presented in the preamble, and the EPA's responses to those comments are available in Docket ID No. EPA-HQ-OAR-2012-0510. A "track changes" version of the regulatory language that reflects how the current FPUF NESHAP is being revised is available in the docket for this action.

Organization of this Document. We provide the following outline to assist in locating information in the preamble.

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I. General Information

A. Does this action apply to me?

Regulated Entities. Categories and entities potentially regulated by this action are shown in Table 1 of this preamble.

Table 1. NESHAP and Industrial Source Category Affected By This Final Action

NESHAP and Source	NAICS code ^a	MACT code ^b
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Category		
Flexible Polyurethane Foam Production	326150	1314

^a North American Industry Classification System.

Table 1 of this preamble is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be affected by the final action for the source category listed. To determine whether your facility is affected, you should examine the applicability criteria in the appropriate NESHAP. If you have any questions regarding the applicability of any aspect of this NESHAP, please contact the appropriate person listed in the preceding FOR FURTHER INFORMATION CONTACT section of this preamble.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final action will be available on the World Wide Web through the Technology Transfer Network (TTN). Following signature by the EPA Administrator, the EPA will post a copy of this final action on the project website at:

http://www.epa.gov/ttn/atw/foam/foampg.html. The TTN provides information and technology exchange in various areas of air pollution control.

b Maximum Achievable Control Technology.

Additional information is available on the RTR web page at http://www.epa.gov/ttn/atw/rrisk/rtrpg.html. This information includes an overview of the RTR program, links to project websites for the RTR source categories, and detailed emissions and other data we used as inputs to the risk assessments.

C. Judicial Review

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this final action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by [INSERT DATE 60 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that "[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review." This section also provides a mechanism for the EPA to reconsider the rule, "[i]f the person raising an objection can demonstrate to the EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and

if such objection is of central relevance to the outcome of the rule." Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, William Jefferson Clinton Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding FOR FURTHER INFORMATION CONTACT section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of hazardous air pollutants (HAP) from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. "Major sources" are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or any combination of HAP at a rate of 25 tpy or more. For major sources, these standards are commonly referred to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy

requirements and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems or techniques that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials or other modifications; enclose systems or processes to eliminate emissions; collect, capture or treat HAP when released from a process, stack, storage or fugitive emissions point; and/or are design, equipment, work practice or operational standards.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements and may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor, under CAA section 112(d)(2). We may establish

standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them "as necessary (taking into account developments in practices, processes, and control technologies)" no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards

pursuant to CAA section 112(f). For more information on the statutory authority for this rule, see 78 FR 66108.

B. What is the FPUF Production source category and how do the NESHAP promulgated on October 7, 1998 regulate its HAP emissions?

The EPA promulgated the FPUF Production NESHAP on October 7, 1998 (63 FR 53979). The standards are codified at 40 CFR part 63, subpart III. The FPUF Production industry consists of facilities that produce slabstock or molded flexible polyurethane foam or rebond foam. The source category covered by these MACT standards currently includes 12 facilities.

The FPUF Production NESHAP contains requirements specific to each of the three types of foam production processes. For slabstock foam production, these standards include diisocyanate and HAP auxiliary blowing agent (ABA) emissions reduction requirements. For molded and rebond foam production, these standards prohibit the use of HAP in mold release agents and equipment cleaners, except in very limited circumstances.

C. What changes have been made to the standards since promulgation of the NESHAP for the FPUF Production source

 $^{^{1}}$ The U.S. Court of Appeals has affirmed this approach of implementing CAA section 112(f)(2)(A): NRDC v. EPA, 529 F.3d 1077, 1083 (D.C. Cir. 2008) ("If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.").

category, and what changes did we propose in our November 4, 2013 RTR proposal?

No changes have been made to the FPUF Production NESHAP since the promulgation of the NESHAP on October 7, 1998. On November 4, 2013, the EPA published a proposed rule in the Federal Register for the FPUF Production NESHAP, 40 CFR part 63, subpart III, proposing revisions to the MACT based on the RTR analyses and proposing additional revisions. We proposed the following revisions:

- A prohibition of the use of HAP-based ABAs for slabstock foam production facilities;
- Revisions to requirements related to emissions during periods
 of SSM, including the addition of provisions for an
 affirmative defense to civil penalties for violations of
 emission standards that are caused by malfunctions;
- The addition of requirements for reporting of performance testing through the ERT;
- Clarifications to the leak detection methods allowed for diisocyanate storage vessels at slabstock foam production facilities; and
- Addition of a schedule for delay of leak repairs for valves and connectors.

III. What is included in this final rule?

Today's action finalizes the EPA's determinations for the FPUF Production source category pursuant to the RTR provisions of CAA section 112, and amends the FPUF Production NESHAP based on those determinations. With one exception, today's action also finalizes the changes to the NESHAP described in section II.C. of the preamble. For the reasons explained in section IV.C of the preamble, we are not including the proposed affirmative defense provisions in the final rule. In the following subsections, we introduce and summarize the final amendments to the FPUF Production NESHAP.

A. What are the final rule amendments based on the risk review for the FPUF Production source category?

Pursuant to CAA section 112(f), we are revising the FPUF Production NESHAP to include a prohibition of the use of HAP or HAP-based products as ABAs for all slabstock FPUF Production operations. We evaluated the costs, emissions reductions, energy implications and cost effectiveness of this standard and determined that this measure is cost effective and technically feasible and will provide the public with an ample margin of safety from exposure to emissions from the FPUF Production source category.

B. What are the final rule amendments based on the technology review for the FPUF Production source category?

We identified one development in practices, processes or control technologies that we determined to be cost-effective.

Therefore, to satisfy the requirements of CAA section 112(d)(6), we are revising the MACT standards to include that development.

Specifically, as we proposed, we are finalizing a prohibition of the use of HAP or HAP-based products as ABAs for all slabstock

FPUF Production operations. As noted in section III.A of the preamble, we are concurrently promulgating this HAP and HAP-based ABA prohibition under section 112(f)(2) of the CAA to provide an ample margin of safety to protect public health.

C. What are the final rule amendments addressing emissions during periods of startup, shutdown and malfunction?

We are finalizing changes to the FPUF Production NESHAP to eliminate the SSM exemption. Consistent with Sierra Club v. EPA, the EPA has established standards in this rule that apply at all times. Table 2 of the General Provisions (applicability table) is being revised to change several of the references related to requirements that apply during periods of SSM. We also eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemption. The EPA also made changes to the rule to remove or modify inappropriate, unnecessary or redundant language in the absence of the SSM exemption. We determined that facilities in this source category can meet the applicable emission standards at all times,

including periods of startup and shutdown, in compliance with the current MACT standards; therefore, the EPA made the determination that no additional standards are needed to address emissions during these periods.

For the reasons explained in section IV.C of the preamble, we are not including the proposed affirmative defense provisions in the final rule.

D. What are the final rule amendments for submission of performance test data to the EPA?

To increase the ease and efficiency of data submittal and data accessibility, we are finalizing changes to the FPUF

Production NESHAP to require owners and operators of FPUF

Production facilities to submit electronic copies of certain required performance test reports through an electronic performance test report tool called the ERT. This requirement to submit performance test data electronically to the EPA does not require any additional performance testing and applies only to those performance tests conducted using test methods that are supported by the ERT.

E. What other changes have been made to the NESHAP?

Today's rule also finalizes clarifications to the leak detection methods allowed for diisocyanate storage vessels at slabstock foam production facilities. During unloading events at these facilities, the current requirements allow the vapor

return line to be inspected for leaks using visual, audible or any other detection method. Today, the EPA is clarifying that "any other detection method" must be an instrumental detection method.

We are also finalizing a revision to the requirements for delay of leak repairs for valves and connectors in diisocyanate service. This revision requires equipment leaks from valves and connectors that are on a delay of repair schedule to have repairs completed as soon as practicable, but not later than 6 months after the leak is detected.

F. What are the effective and compliance dates of the revisions to the FPUF Production NESHAP?

The revisions to the FPUF Production NESHAP being promulgated in this action are effective on [INSERT THE DATE OF PUBLICATION IN FEDERAL REGISTER].

The compliance date for the revised SSM requirements and electronic reporting requirements for existing FPUF Production facilities is [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]. The compliance date for the new requirements prohibiting the use of HAP ABAs for existing slabstock FPUF Production facilities is 90 days from the effective date of the promulgated standards, [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

New sources must comply with all of the standards immediately upon the effective date of the standard, [INSERT THE DATE OF PUBLICATION IN FEDERAL REGISTER], or upon startup, whichever is later.

IV. What is the rationale for our final decisions and amendments for the FPUF Production source category?

For each issue, this section provides a description of what we proposed and are finalizing for the issue, the EPA's rationale for the final decisions and amendments and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document available in the docket.

A. Residual Risk Review for the FPUF Production Source Category 1. What did we propose pursuant to CAA section 112(f) for the FPUF Production source category?

Pursuant to CAA section 112(f), we conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in the November 4, 2013, proposed rule for the FPUF Production NESHAP (78 FR 66108). The results of the risk assessment are presented briefly below in Table 2, and in more detail in the residual risk document: Final Residual Risk Assessment for the Flexible Polyurethane Foam Production Source

Category, which is available in the docket for this rulemaking. Based on actual emissions for the FPUF Production source category, the maximum individual risk (MIR) was estimated to be up to 0.7-in-1 million, the maximum chronic non-cancer total organ-specific hazard index (TOSHI) value was estimated to be up to 0.9, and the maximum off-site acute hazard quotient (HQ) value was estimated to be up to 0.9. The total estimated national cancer incidence from these facilities based on actual emission levels was 0.00004 excess cancer cases per year, or one case in every 25,000 years. Based on MACT-allowable emissions for the FPUF Production source category, the MIR was estimated to be up to 5-in-1 million, the maximum chronic non-cancer TOSHI value was estimated to be up to 0.9, and the maximum off-site acute HQ value was estimated to be up to 4. The total estimated national cancer incidence from these facilities based on MACTallowable emission levels was 0.0004 excess cancer cases per year, or one case in every 2,500 years. We also found there were no persistent and bio-accumulative HAP (PB-HAP) or any of the seven "environmental HAP" emitted by facilities in this source category. We weighed all health risk factors in our risk acceptability determination, and we proposed that the residual risks to public health from the FPUF Production source category are acceptable.

Table 2. Flexible Polyurethane Foam Production Inhalation Risk

Assessment Results

			Estimated			
			Population			
			_			
			at	Estimated		
		Maximum	increased	Annual	Maximum	
		Individual	Risk of	Cancer	Chronic	Maximum
		Cancer	cancer ≥ 1-	Incidence	Non-	Screening
Emissions	Number of	Risk (in 1	in-1	(cases	cancer	Acute Non-
Level	Facilities ¹	million) ²	Million	per year)	TOSHI3	cancer HQ4
Actual	13	0.7	0	0.00004	0.9	ио оо
Emissions	13	0.7	U	0.00004	0.9	$HQ_{ERPG-1} = 0.9$
Level						
MACT-						110 4
Allowable	13	5	700	0.0004	0.9	$HQ_{REL} = 4$
Emissions						$HQ_{ERPG-1}=0.9$
Level						

¹ Number of facilities evaluated in the risk analysis.

We then considered whether the FPUF Production NESHAP provides an ample margin of safety to protect public health and prevent adverse environmental effects. In considering whether the standards should be tightened, we considered the same risk factors that we considered for our acceptability determination and also considered the costs, technological feasibility and other relevant factors related to each of the "developments in practices, processes and control technologies" identified under our technology review. Based on that analysis, we proposed to prohibit the use of HAP and HAP-based ABAs at slabstock foam production facilities, which were shown to contribute nearly 100 percent to the maximum individual cancer risks at the MACT-

² Maximum individual excess lifetime cancer risk due to HAP emissions from the source category.

³ Maximum TOSHI. The target organ with the highest TOSHI for the FPUF Production source category is the respiratory system.

⁴ The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop an array of HQ values. HQ values shown use the lowest available acute threshold value, which in most cases is the REL. When HQ values exceed 1, we also show HQ values using the next lowest available acute dose-response value.

allowable emissions level for this source category. Furthermore, we proposed that additional HAP emissions controls for FPUF production diisocyanate storage vessels and diisocyanate equipment leaks are not necessary to provide an ample margin of safety.

2. How did the risk review change for the FPUF Production source category since the proposed rule?

Information received from a commenter on the proposed rule indicates that one facility included in the FPUF Production dataset at proposal is not a major source of HAP and is not subject to the FPUF Production NESHAP. Based on this information, we determined that the modeling dataset for the FPUF Production source category does not need to include this facility. Removing this facility from the dataset and performing additional modeling would result in slightly decreased emissions and risks from the source category. This change would not affect our decisions regarding risk acceptability or ample margin of safety; thus, we determined that additional modeling to include this revision is not necessary.

We revised the risk assessment documentation for one aspect of the analysis which was not explained previously. To estimate ambient concentrations for evaluating long-term exposures, the Human Exposure Model (HEM) uses the geographic centroids of census blocks as dispersion model receptors. The census block

centroids are generally good surrogates for where people live within a census block; however, risk estimates based on such centroids can be underestimated for those residences nearer to a facility than the centroid and overestimated for those residences farther from the facility than the centroid. For this source category, we added several receptors for census blocks where the centroid location was not representative of the residential locations. We revised the risk assessment documentation to provide additional information on census block centroid changes in Appendix 7 of the Final Residual Risk
Foam Production Source
Category document, which is available in the docket for this action.

We also revised the proximity analysis, which identifies any overrepresentation of minority, low income or indigenous populations near facilities in the source category, to add a map of the facilities in the source category, and to remove a previously included facility that is not part of the source category. The results of this analysis are presented in the section of this preamble titled, "Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations."

3. What comments did we receive on the risk review, and what are our responses?

Several comments were received regarding the FPUF

Production source category risk review. The following is a

summary of one of those comments and our response. Other

comments received and our responses to those comments can be

found in the Comment Summary and Response document available in

the docket for this action (EPA-HQ-OAR-2012-0510).

Comment: One commenter stated that the EPA refused to strengthen the existing standards for storage vessels and equipment leaks based purely on its cost-benefit analysis. The commenter declared that the EPA's approach considered only the cost per ton of HAP emission reduction, without assessing relevant factors such as: The individual HAP emitted and the impact those HAP can have at a level below 1 ton; how many people would be affected by the potential emission reductions; where they live and whether they are in a community containing multiple HAP sources; or whether they face a longstanding environmental justice impact. The commenter further stated that the EPA also did not consider or address whether the standards would provide any "margin of safety" to protect public health, much less whether the margin is "ample." Thus, the commenter claims the EPA ignored and violated section 112(f)(2) of the CAA.

Response: We disagree with the comment that the EPA based its decision under CAA section 112(f) that it was not necessary

to tighten the FPUF Production standards for storage vessels and equipment leaks only on a cost-benefit analysis. To address the requirements of CAA section 112(f)(2) for the FPUF Production source category, we performed a risk assessment, and based on the results of that assessment, made a determination of whether emissions remaining after implementation of the existing standards result in risks that are acceptable. We did not consider costs as part of that analysis. For purposes of determining whether the existing standards provide an ample margin of safety to protect public health, we assessed the additional risk reductions that would result from tightening the standards (see 78 FR 66123-66124). Specifically, we investigated the possibility of requiring additional emissions controls for diisocyanate storage vessels and equipment leaks at slabstock production facilities and determined that these control options would not achieve a reduction in the maximum individual cancer risks or any of the other risk metrics. In addition to looking at the effect of these controls on risk, we also determined that they would result in very low emissions reductions and would be expensive to implement (see 78 FR 66123-66124). Based on the analysis of the emission and risk reductions and the costs, we proposed (and are determining in this final rule) that it is not necessary to modify the existing standards to provide an ample margin of safety.

Further, the EPA disagrees with the commenter that we did not assess the individual HAP emitted or the impact those HAP can have at a level below 1 tpy. As noted at proposal (see 78 FR 66122), we assessed the risks considering all individual HAP emissions, regardless of emission level, from the FPUF Production source category. We also assessed the impact that the potential emission control options would have on the level of emissions of the individual HAP and on the risks associated with those emissions.

Regarding the comment that the EPA should consider whether people live in a community containing multiple HAP sources, we note that background risks and contributions to risk from sources outside the facilities under review were not considered in the ample margin of safety determination for this source category, mainly because of the significant uncertainties associated with emissions estimates for such sources (see 78 FR 66121). Our approach here is consistent with the approach we took regarding this issue in the Hazardous Organic NESHAP (HON) RTR, which the court upheld in the face of claims that the EPA had not adequately considered background (NRDC v. EPA, 529 F.3d 1077 (D.C. Cir. 2008)).

With regard to the comment concerning longstanding environmental justice impacts, we refer to the preamble of the proposed rule regarding how we examine environmental justice

concerns generally, as well as in this specific rulemaking.

4. What is the rationale for our final decisions for the risk review?

For the reasons explained in the proposed rule, we determined that the FPUF Production NESHAP, as modified to include the HAP and HAP-based ABA prohibition described above, will provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Since proposal, neither the risk assessment nor our determinations regarding risk acceptability and ample margin of safety have changed.

Therefore, pursuant to CAA section 112(f)(2), we are revising the FPUF Production NESHAP to prohibit the use of HAP and HAP-based ABAs at slabstock foam production facilities to provide an ample margin of safety.

- B. Technology Review for the FPUF Production Source Category
- 1. What did we propose pursuant to CAA Section 112(d)(6) for the FPUF Production source category?

Pursuant to CAA section 112(d)(6), we conducted a technology review, which focused on identifying and evaluating developments in practices, processes and control technologies for the emission sources in the FPUF Production source category. At proposal, we identified developments in practices, processes or control technologies for slabstock production lines, diisocyanate storage vessels and equipment leaks.

For slabstock production facilities, the current MACT standards allow limited use of HAP-based ABAs in the slabstock foam production line, while prohibiting the use of HAP-based products in equipment cleaners, except at facilities operating under the provisions for a source-wide emission limit for a single HAP ABA. Prohibiting the use of HAP-based ABAs and HAPbased equipment cleaners at slabstock foam production facilities was identified at proposal as a development in practices and/or processes that could reduce HAP emissions from the slabstock foam production facilities, principally from the foam production line. Data available to the EPA showed that none of the facilities subject to the FPUF Production NESHAP were using any HAP ABAs, or ABAs containing HAP (i.e., HAP-based ABAs). Therefore, we concluded that there would be no cost associated with codifying a prohibition on the use of HAP or HAP-based ABAs, which is consistent with current industry practice.

For diisocyanate storage vessels, two potential control technologies were identified at proposal, regenerative and recuperative thermal oxidizers, which could increase the emissions capture and control efficiency from 95 percent to 98 percent for those tanks that are currently controlled with a carbon adsorption system. We estimated an additional emission reduction of 0.0026 tpy of diisocyanate would be associated with this increase in emissions control efficiency, and the estimated

costs would be \$124 million and \$270 million per ton of HAP reduced for regenerative and recuperative thermal oxidizers, respectively.

For equipment leaks, two potential developments in practices, processes or control technologies were identified at proposal: use of "leakless" valves in diisocyanate service at slabstock facilities and implementation of an enhanced leak detection and repair (LDAR) program for diisocyanate equipment leaks at slabstock foam production facilities.

"Leakless" valves are in place in some facilities outside the FPUF Production source category, particularly oil refineries. We analyzed the costs associated with requiring this technology for valves in diisocyanate service in the FPUF Production source category using cost estimates developed for the synthetic organic chemical manufacturing industry.

Nationwide annual costs were estimated to be \$310,000/yr, with total capital investments of \$2,260,000. Emission reductions were estimated to be approximately 1 tpy, resulting in a cost effectiveness of \$305,000/ton HAP reduction.

At proposal, we evaluated an enhanced LDAR program for equipment in diisocyanate service at slabstock foam production facilities that would require instrumental monitoring, employing Method 21 of 40 CFR part 60, appendix A, and we considered two sets of leak definitions for this program. For both sets of leak

definitions, nationwide total annual costs are estimated to be approximately \$28,200/yr, with total capital investments of approximately \$32,400. Reduction of HAP emissions are estimated to be approximately 0.38 tpy, resulting in a cost effectiveness of approximately \$74,000/ton HAP reduction.

In addition to instrumental monitoring, another aspect of an enhanced LDAR program was investigated at proposal. The current MACT standards allow leak repairs to be delayed under certain circumstances. Limits on the number of leaking components awaiting repair were identified as a development in a practice that could reduce diisocyanate emissions from equipment leaks as part of an enhanced LDAR program. We estimate the costs of requirements that would limit the number of leaking equipment components awaiting repair, require mass emission testing for leaking valves and require valves with high leak rates to be repaired within 7 days. Nationwide annual costs are estimated to be \$19,300/yr, with no capital investments required. Emission reductions are estimated to be 0.08 tpy, resulting in a cost effectiveness of \$233,800 per ton of HAP reduction for equipment in diisocyanate service at slabstock facilities.

Based on the costs and the emission reductions that would be achieved with the identified developments, we proposed that it was necessary to revise the MACT standard pursuant to CAA section 112(d)(6) to prohibit the use of HAP and HAP-based ABAs

at slabstock foam production facilities, and we proposed that it was not necessary to revise the MACT standards pursuant to CAA section 112(d)(6) to require the identified developments in practices, processes or control technologies for diisocyanate storage vessels or equipment leaks. More information concerning our technology review can be found in the memorandum titled,

Technology Review and Cost Impacts for the Proposed Amendments to the Flexible Polyurethane Foam Production Source Category, which is available in the docket and in the preamble to the proposed rule, 78 FR at 66108 to 66138.

2. How did the technology review change for the FPUF Production source category?

We have not changed any aspects of our technology review since the proposal.

3. What key comments did we receive on the technology review, and what are our responses?

The following is a summary of the comments received regarding the FPUF Production source category technology review and our responses to these comments.

Comment: One commenter claims the EPA did not fulfill the letter or purpose of CAA section 112(d)(6) to ensure that the EPA updates standards when developments have occurred that would create stronger protection for public health. Another commenter also believes this rule could be more stringent in order to

encourage advancement in technology to reduce HAP emissions and noted that the EPA's cost-benefit analysis of control technologies considered does not foster growth of more effective or less expensive technologies.

Response: CAA section 112(d)(6) requires the EPA to "review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years." The EPA retains significant discretion in balancing relevant factors in determining whether it is "necessary" to revise the existing technology-based MACT standards. See, e.g., Sierra Club v. EPA, 325 F. 3d 374, 378 (D.C. Cir. 2003) (under CAA section 202(1)(2), the EPA is to consider factors beyond pure technological capability, and the statute does not direct how the EPA should weigh such factors). In reviewing standards promulgated pursuant to CAA section 112(d)(2) and (3), and determining whether revising them is "necessary" under section 112(d)(6), the EPA may take into consideration cost and feasibility when evaluating developments in practices, processes and control technologies.

The commenter does not specifically indicate what action the EPA should take to "foster growth of more effective or less expensive technologies." To the extent the commenter is suggesting that the EPA require controls under CAA section

112(d)(6) that it has concluded are not cost effective at this time in the hope that it will spur action to find ways to reduce cost, we disagree that such a result is required by CAA section 112(d)(6).

Comment: One commenter stated that by not updating the leak definitions of the rule, the EPA is authorizing an unlimited amount of HAP to be emitted, as long as the leaks are below the leak definitions. According to the commenter, this violates

National Lime Association v. EPA, 233 F.3d 625 (D.C. Cir. 2000), in which the Court held that the EPA must set an emission standard to limit all emitted HAP. The commenter asserted that the EPA must set emission limits that prohibit leaks above specific levels.

Response: We disagree with the commenter that the EPA must set emission limits that prohibit leaks above a certain level. Under CAA section 112, national emission standards must, whenever possible, take the format of a numerical emission standard. However, CAA section 112(h)(2) recognizes two conditions under which the EPA is not required to establish a numerical emission limit. These conditions are (1) If the pollutants cannot be emitted through a conveyance designed and constructed to emit or capture the pollutant or (2) if the application of measurement methodology is not practicable due to technological and economic limitations. If a numerical emission

limit cannot be established, the EPA may instead establish a design, equipment, work practice, or operational standard or combination thereof. For equipment leak sources, the EPA has determined that equipment leaks meet both of these conditions, and it is not feasible to prescribe or enforce emission standards. See e.g., 57 FR 62608 (HON)).

In the 1998 FPUF Production NESHAP, the EPA developed LDAR requirements for equipment leaks at slabstock foam production facilities, which are primarily work practices. The 1998 FPUF Production NESHAP for equipment leaks does not specify numeric leak definitions. These standards require an LDAR program that employs visual, audible or other methods for detecting leaks. In the technology review we conducted pursuant to CAA section 112(d)(6), we investigated an option to require an enhanced LDAR program that would require instrument monitoring for leaks using EPA Method 21 and numeric leak definitions. The costs of an enhanced LDAR program for the FPUF Production source category using either of the two analyzed sets of leak definitions are estimated to be approximately \$28,200/yr, with total capital investments of approximately \$32,400. Reduction of HAP emissions are estimated to be about 0.38 tpy, with a cost effectiveness of approximately \$74,000/ton HAP reduction. Because of the high cost of these controls, we proposed (and are determining in this final rule) that it is not necessary to revise the MACT

standards pursuant to CAA section 112(d)(6) to include the enhanced LDAR program.

4. What is our final decision for the technology review?

For the reasons provided above and in the preamble to the proposed rule, we have determined that it is necessary, pursuant to CAA section 112(d)(6), to revise the MACT standards to prohibit the use of HAP and HAP-based ABAs at slabstock foam production facilities. Also explained in the preamble to the proposed rule, there are no estimated costs, industry is already complying with this HAP and HAP-based ABA prohibition in practice and reductions in allowable emissions will be achieved. As noted in section IV.A.3 of the preamble, we are promulgating this HAP and HAP-based ABA prohibition concurrently under section 112(f)(2) of the CAA to provide an ample margin of safety to protect public health. Furthermore, for the reasons discussed above and in the preamble to the proposed rule, we have determined that it is not necessary pursuant to CAA section 112(d)(6) to revise the MACT to require additional HAP emission controls for FPUF Production diisocyanate storage vessels or diisocyanate equipment leaks.

- C. Startup, Shutdown and Malfunction Provisions for the FPUF

 Production Source Category
- 1. What SSM provisions did we propose for the FPUF Production source category?

In its 2008 decision in Sierra Club v. EPA, 551 F.3d 1019 (D.C. Cir. 2008), the United States Court of Appeals for the District of Columbia Circuit vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and 40 CFR 63.6(h)(1), holding that under CAA section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously. Consistent with Sierra Club v. EPA, the EPA proposed standards in this rule that apply at all times. In proposing the standards in this rule, the EPA took into account startup and shutdown periods and, for the reasons explained below, did not propose alternate standards for those periods. Information on periods of startup and shutdown received from the facilities in the FPUF Production industry indicated that emissions during these periods are the same as during normal operations. The primary means of compliance with the standards are through work practices and product substitutions, which eliminate the use of HAP, and are in place at all times. Therefore, we determined that separate standards for periods of startup and shutdown are not necessary.

Periods of startup, normal operations and shutdown are all predictable and routine aspects of a source's operations.

However, by contrast, malfunction is defined as a "sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment or a process to operate in a normal or usual manner * * *" (40 CFR 63.2). The EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards. Under CAA section 112, emissions standards for new sources must be no less stringent than the level "achieved" by the best controlled similar source and for existing sources generally must be no less stringent than the average emission limitation "achieved" by the best performing 12 percent of sources in the category. There is nothing in CAA section 112 that directs the agency to consider malfunctions in determining the level "achieved" by the best performing sources when setting emission standards. As the D.C. Circuit has recognized, the phrase "average emissions limitation achieved by the best performing 12 percent of" sources "says nothing about how the performance of the best units is to be calculated." Nat'l Ass'n of Clean Water Agencies v. EPA, 734 F.3d 1115, 1141 (D.C. Cir. 2013). While the EPA accounts for variability in setting emissions standards, nothing in CAA section 112 requires the agency to consider malfunctions as part of that analysis. A malfunction should not be treated in the same manner as the type of variation in performance that

occurs during routine operations of a source. A malfunction is a failure of the source to perform in a "normal or usual manner" and no statutory language compels EPA to consider such events in setting CAA section 112 standards.

Further, accounting for malfunctions in setting emission standards would be difficult, if not impossible, given the myriad different types of malfunctions that can occur across all sources in the category and given the difficulties associated with predicting or accounting for the frequency, degree and duration of various malfunctions that might occur. Therefore, the performance of units that are malfunctioning is not "reasonably" foreseeable. See, e.g., Sierra Club v. EPA, 167 F.3d 658, 662 (D.C. Cir. 1999) ("The EPA typically has wide latitude in determining the extent of data-gathering necessary to solve a problem. We generally defer to an agency's decision to proceed on the basis of imperfect scientific information, rather than to 'invest the resources to conduct the perfect study.'") See also, Weyerhaeuser v. Costle, 590 F.2d 1011, 1058 (D.C. Cir. 1978) ("In the nature of things, no general limit, individual permit, or even any upset provision can anticipate all upset situations. After a certain point, the transgression of regulatory limits caused by 'uncontrollable acts of third parties, ' such as strikes, sabotage, operator intoxication or insanity, and a variety of other eventualities, must be a matter for the administrative exercise of case-by-case enforcement discretion, not for specification in advance by regulation.").

In addition, emissions during a malfunction event can be significantly higher than emissions at any other time of source operation. For example, if an air pollution control device with 99 percent removal goes off-line as a result of a malfunction (as might happen if, for example, the bags in a baghouse catch fire) and the emission unit is a steady state type unit that would take days to shut down, the source would go from 99 percent control to zero control until the control device was repaired. The source's emissions during the malfunction would be 100 times higher than during normal operations. As such, the emissions over a 4-day malfunction period would exceed the annual emissions of the source during normal operations. As this example illustrates, accounting for malfunctions could lead to standards that are not reflective of (and significantly less stringent than) levels that are achieved by a well-performing non-malfunctioning source. It is reasonable to interpret CAA section 112 to avoid such a result. The EPA's approach to malfunctions is consistent with CAA section 112 and is a reasonable interpretation of the statute.

In the event that a source fails to comply with the applicable CAA section 112 standards as a result of a malfunction event, the EPA would determine an appropriate

response based on, among other things, the good faith efforts of the source to minimize emissions during malfunction periods, including preventative and corrective actions, as well as root cause analyses to ascertain and rectify excess emissions. The EPA would also consider whether the source's failure to comply with the CAA section 112 standard was, in fact, "sudden, infrequent, not reasonably preventable" and was not instead "caused in part by poor maintenance or careless operation." 40 CFR 63.2 (definition of malfunction).

Further, to the extent the EPA files an enforcement action against a source for violation of an emission standard, the source can raise any and all defenses in that enforcement action, and the federal district court will determine what, if any, relief is appropriate. The same is true for citizen enforcement actions. Similarly, the presiding officer in an administrative proceeding can consider any defense raised and determine whether administrative penalties are appropriate. Recognizing that even equipment that is properly designed and maintained can sometimes fail and that such failure can sometimes cause a violation of the relevant emission standard, we proposed to add provisions for an affirmative defense to civil penalties for violations of emission standards that are caused by malfunctions. We also proposed other regulatory

provisions to specify the elements that would be necessary to establish this affirmative defense.

To address the United States Court of Appeals for the District of Columbia Circuit vacatur of portions of the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM, Sierra Club v. EPA, 551 F.3d 1019 (D.C. Cir. 2008), we proposed to revise and add certain provisions to the FPUF Production rule. As described in detail below, we proposed to revise the General Provisions (Table 2) to change several of the references related to requirements that apply during periods of SSM. We also proposed to add the following provisions to the FPUF Production rule: (1) The general duty to minimize emissions at all times, (2) the requirement for sources to comply with the emission limits in the rule at all times, and (3) malfunction recordkeeping and reporting requirements.

a. 40 CFR 63.1290(d)(4) General Duty

We proposed to revise the General Provisions table (Table 2) entry for 40 CFR 63.6(e)(1)-(2) by adding rows specifically for 40 CFR 63.6(e)(1)(i), 63.6(e)(1)(ii) and 63.6(e)(1)(iii) and to include a "no" in the second column for the 40 CFR 63.6(e)(1)(i) entry. Section 63.6(e)(1)(i) describes the general duty to minimize emissions. Some of the language in that section is no longer necessary or appropriate in light of the elimination of the SSM exemption. We proposed instead to add

general duty regulatory text at 40 CFR 63.1290(d)(4) that reflects the general duty to minimize emissions while eliminating the reference to periods covered by an SSM exemption. The current language in 40 CFR 63.6(e)(1)(i) characterizes what the general duty entails during periods of SSM. With the elimination of the SSM exemption, there is no need to differentiate between normal operations, startup and shutdown and malfunction events in describing the general duty. Therefore the language the EPA proposed did not include that language from 40 CFR 63.6(e)(1).

We also proposed to include a "no" in the second column for the newly added 40 CFR 63.6(e)(1)(ii) entry. Section 63.6(e)(1)(ii) imposes requirements that are not necessary with the elimination of the SSM exemption or are redundant of the general duty requirement proposed to be added at 40 CFR 63.1290(d)(4).

b. Compliance with Standards

We proposed to revise the General Provisions table (Table 2) entry for 40 CFR 63.6(f) by adding a specific entry for 40 CFR 63.6(f)(1) and including a "no" in the second column for this entry. The current language of 40CFR 63.6, paragraph (f)(1) exempts sources from non-opacity standards during periods of SSM. As discussed above, the court in <u>Sierra Club</u> vacated the exemptions contained in section 63.6(f)(1) and held that the CAA

requires that CAA section 112 standards apply continuously.

Consistent with Sierra Club, the EPA proposed to revise the standards in this rule to apply at all times.

c. 40 CFR 63.1307(h) Recordkeeping

We proposed to revise the General Provisions table (Table 2) entry for 40 CFR 63.10(a)-(b) by adding rows specifically for 40 CFR63.10(a), 63.10(b)(1), 63.10 b)(2)(i), 63.10(b)(2)(ii), 63.10(b)(2)(iii), 63.10(b)(2)(iv)-(xi), 63.10(b)(2)(xii), 63.10(b)(xiii) and 63.10(b)(2)(xiv) in order to specify changes we proposed to the applicability of several of the 40 CFR63.10(b)(2) paragraphs.

In the entry for 40 CFR 63.10(b)(2)(i), we proposed to include a "no" in the second column. Section 63.10(b)(2)(i) describes the recordkeeping requirements during startup and shutdown. These recording provisions are no longer necessary because the EPA proposed that recordkeeping and reporting applicable to normal operations would apply to startup and shutdown. In the absence of special provisions applicable to startup and shutdown, such as a startup and shutdown plan, there is no reason to retain additional recordkeeping for startup and shutdown periods. In the entry for 40 CFR 63.10(b)(2)(ii), we proposed to include a "no" in the second column. Section 63.10(b)(2)(ii) describes the recordkeeping requirements during a malfunction. The EPA proposed to add such requirements to 40

CFR 63.1307(h). It is not necessary to cross-reference the General Provisions because we proposed specific regulatory text addressing recordkeeping for malfunctions in the FPUF Production NESHAP. The provision in the General Provisions requires the creation and retention of a record of the occurrence and duration of each malfunction of process, air pollution control, and monitoring equipment. The EPA proposed requirement for 40 CFR 63.1307(h) provides that for any failure to meet an applicable standard, the source is required to record the date, time, and duration of the failure rather than the "occurrence." The EPA also proposed to add to 40 CFR 63.1307(h) a requirement that sources keep records that include a list of the affected sources or equipment and actions taken to minimize emissions, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions. Examples of such methods would include product loss calculations, mass balance calculations, measurements when available or engineering judgment based on known process parameters.

The EPA proposed to require that sources keep records of this information to ensure that there is adequate information to allow the EPA to determine the severity of any failure to meet a standard and to provide data that may document how the source

met the general duty to minimize emissions when the source has failed to meet an applicable standard.

We proposed to include a "no" in the second column in the entry for 40 CFR 63.10(b)(2)(iv) and 63.10(b)(2)(v). When applicable, these paragraphs in the General Provisions require sources to record actions taken during SSM events when actions were inconsistent with their SSM plan. These requirements are not appropriate because SSM plans are not (and were not) required by the FPUF Production NESHAP, and the General Provisions applicability table referenced these sections in error.

d. 40 CFR 63.1306(f) Reporting

We proposed to revise the General Provisions table (Table 2) entry for 40 CFR 63.10(d)(4)-(5) by adding a separate entry for 40 CFR 63.10(d)(5) and including a "no" in the second column for this 40 CFR 63.10(d)(5) entry. Section 63.10(d)(5) describes the reporting requirements for startups, shutdowns, and malfunctions. As explained above, the EPA proposed to add reporting requirements to 40 CFR 63.1306(f) in place of a cross-reference to the reporting requirements in the General Provisions. The proposed requirement for the FPUF Production standard does not include periodic SSM reports as stand-alone reports. Rather, the proposed language requires sources that fail to meet an applicable standard at any time to report the

information concerning such events in reports already required under the FPUF Production standard -- the semiannual report for slabstock affected sources and the annual compliance certification for molded and rebond affected sources. We describe the content of these proposed reports in section IV.C.1.c of the preamble.

Because we proposed specific recordkeeping requirements in the FPUF standard, we also proposed to eliminate the cross reference to section $63.10\,(d)\,(5)\,(i)$ that contains the description of the SSM report format and submittal schedule for the General Provisions.

The proposed rule also eliminated the cross-reference to section 63.10(d)(5)(ii). Section 63.10(d)(5)(ii) describes an immediate report for startups, shutdown, and malfunctions when a source failed to meet an applicable standard but did not follow the SSM plan. These requirements are not appropriate because SSM plans are not (and were not) required by the FPUF Production NESHAP, and the General Provisions applicability table referenced this section in error.

2. How did the SSM provisions change for the FPUF Production source category?

In several prior CAA section 112 rules and in the proposed rule, the EPA included an affirmative defense to civil penalties for violations caused by malfunctions in an effort to create a

system that incorporates some flexibility, recognizing that there is a tension, inherent in many types of air regulations, to ensure adequate compliance while simultaneously recognizing that despite the most diligent of efforts, emission standards may be violated under circumstances entirely beyond the control of the source. Although the EPA recognized that its case-by-case enforcement discretion provides sufficient flexibility in these circumstances, it included the affirmative defense to provide a more formalized approach and more regulatory clarity. See Weyerhaeuser Co. v. Costle, 590 F.2d 1011, 1057-58 (D.C. Cir. 1978) (holding that an informal case-by-case enforcement discretion approach is adequate); but see Marathon Oil Co. v. EPA, 564 F.2d 1253, 1272-73 (9th Cir. 1977) (requiring a more formalized approach to consideration of "upsets beyond the control of the permit holder."). Under the EPA's regulatory affirmative defense provisions, if a source could demonstrate in a judicial or administrative proceeding that it had met the requirements of the affirmative defense in the regulation, civil penalties would not be assessed. Recently, the United States Court of Appeals for the District of Columbia Circuit vacated an affirmative defense in one of the EPA's CAA Section 112 regulations. NRDC v. EPA, No. 10-1371 (D.C. Cir. April 18, 2014) 2014 U.S. App. LEXIS 7281 (vacating affirmative defense provisions in a CAA Section 112 rule establishing emission

standards for Portland cement kilns). The court found that the EPA lacked authority to establish an affirmative defense for private civil suits and held that under the CAA, the authority to determine civil penalty amounts in such cases lies exclusively with the courts, not the EPA. Specifically, the Court found: "As the language of the statute makes clear, the courts determine, on a case-by-case basis, whether civil penalties are 'appropriate.'" See NRDC, 2014 U.S. App. LEXIS 7281 at *21 ("[U]nder this statute, deciding whether penalties are 'appropriate' in a given private civil suit is a job for the courts, not EPA.").²

In light of NRDC, the EPA is not including a regulatory affirmative defense provision in the final rule. As explained above, if a source is unable to comply with emissions standards as a result of a malfunction, the EPA may use its case-by-case enforcement discretion to provide flexibility, as appropriate. Further, as the D.C. Circuit recognized, in an EPA or citizen enforcement action, the court has the discretion to consider any defense raised and determine whether penalties are appropriate. Cf. NRDC, 2014 U.S. App. LEXIS 7281 at *24 (arguments that

 $^{^2}$ The court's reasoning in <u>NRDC</u> focuses on civil judicial actions. The Court noted that "EPA's ability to determine whether penalties should be assessed for Clean Air Act violations extends only to administrative penalties, not to civil penalties imposed by a court." Id.

violations caused by unavoidable technology failures can be made to the courts in future civil cases when the issue arises). The same is true for the presiding officer in EPA administrative enforcement actions.³

3. What key comments did we receive on the SSM provisions, and what are our responses?

Several comments were received regarding the proposed revisions to the SSM provisions for the FPUF Production source category. The following is a summary of one of these comments and our response to that comment. Other comments received and our responses to those comments can be found in the Comment Summary and Response document available in the docket for this action (EPA-HQ-OAR-2012-0510).

Comment: One commenter states that "EPA is legally required to remove all unlawful exemptions from the emission standards that have previously existed for SSM and not to set any new such exemptions. The agency recognizes this is necessary and that it is important for EPA to remove these exemptions in this rulemaking. 78 Fed. Reg. at 66,126. EPA is taking comment

³ Although the $\underline{\text{NRDC}}$ case does not address the EPA's authority to establish an affirmative defense to penalties that is available in administrative enforcement actions, the EPA is not including such an affirmative defense in the final rule. As explained above, such an affirmative defense is not necessary. Moreover, assessment of penalties for violations caused by malfunctions in administrative proceedings and judicial proceedings should be consistent. $\underline{\text{CF}}$. CAA section 113(e) (requiring both the Administrator and the court to take specified criteria into account when assessing penalties).

on the requirements it must change to comply with the D.C. Circuit's decision in <u>Sierra Club</u> v. <u>EPA</u>, 551 F.3d 1019 (D.C. Cir. 2008)." The commenter claims that equipment leaks are a kind of equipment malfunction and that EPA may not authorize any such leaks, because to do so would be in violation of CAA section 302(k) and D.C. Circuit precedent the <u>Sierra Club</u> v. <u>EPA</u> decision. The commenter also stated EPA's proposal to not update the leak detection and repair (LDAR) requirements is an unlawful authorization of a malfunction exemption.

Response: We disagree with the commenter's claim that the types of equipment leaks addressed in the FPUF Production NESHAP are "malfunctions." Equipment leaks typically occur from equipment such as valves, transfer pumps and connectors in diisocyanate service. 40 CFR 63.1294; See also 63 FR at 53982. At the time we developed the NESHAP for this source category, we recognized that these emission points regularly emit small quantities of HAP, and we promulgated standards regulating equipment leaks from these components at 40 CFR 63.1294. This provision requires flexible polyurethane foam facilities to monitor for leaks and to repair any detected leaks. This requirement does not establish any exemption, and the commenter's suggestion that leaks are "exempt" from regulation or that they are "authorized" is not supported. While any specific equipment leak is not predictable, the types of

equipment leaks addressed by the regulations at 40 CFR 63.1294 are fairly routine emissions from sources and are not the type of unpredictable or infrequent event for which we cannot anticipate when, where or how they may occur and that we generally consider to be malfunctions.

4. What is the rationale for our final approach for the SSM provisions?

For the reasons provided above and in the preamble for the proposed rule, we have removed the SSM exemption from the FPUF Production NESHAP; eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemption; and removed or modified inappropriate, unnecessary or redundant language in the absence of the SSM exemption. We are finalizing our proposed determination that no additional standards are needed to address emissions during startup or shutdown periods.

Furthermore, for the reasons provided in section IV.C. of the preamble, we are not including the proposed affirmative defense provisions in the final rule.

- D. Electronic Reporting of Performance Test Data Provisions for the FPUF Production Source Category
- 1. What provisions regarding electronic reporting of performance test data did we propose for the FPUF Production source category?

As stated in the preamble to the proposed rule, the EPA proposed to take a step to increase the ease and efficiency of data submittal and data accessibility. Specifically, the EPA proposed to require owners and operators of FPUF production facilities to submit electronic copies of certain required performance test reports. The details are provided in the FPUF Production proposal.

2. How did the provisions regarding electronic reporting of performance test data change for the FPUF Production source category?

We reviewed the proposed provisions regarding the electronic reporting of performance test data and made minor edits to the language to clarify these requirements.

3. What key comments did we receive on the provisions regarding electronic reporting of performance test data, and what are our responses?

No comments regarding electronic reporting of performance test data were received.

4. What is the rationale for our final action regarding electronic reporting of performance test data?

For the reasons provided below, the EPA is finalizing the proposed provisions requiring owners and operators of FPUF Production facilities to submit electronic copies of certain required performance test reports.

Data will be collected by direct computer-to-computer electronic transfer using EPA-provided software. This EPA-provided software is an electronic performance test report tool called the ERT. The ERT will generate an electronic report package which will be submitted to the Compliance and Emissions Data Reporting Interface (CEDRI) and then archived to the EPA's Central Data Exchange (CDX). A description and instructions for use of the ERT can be found at:

http://www.epa.gov/ttn/chief/ert/index.html and CEDRI can be accessed through the CDX website: (http://www.epa.gov/cdx).

The requirement to submit performance test data electronically to the EPA will not create any additional performance testing and will apply only to those performance tests conducted using test methods that are supported by the ERT. A listing of the pollutants and test methods supported by the ERT is available at the ERT website. Further, the EPA believes, through this approach, industry will save time in the performance test submittal process. Additionally, this rulemaking benefits industry by reducing recordkeeping costs as the performance test reports that are submitted to the EPA using CEDRI will no longer be required to be kept in hard copy.

State, local and tribal agencies may benefit from more streamlined and accurate review of performance test data that will be available on the EPA WebFIRE database. Additionally,

performance test data will become available to the public through WebFIRE. Having such data publicly available enhances transparency and accountability. For a more thorough discussion of electronic reporting of performance tests using direct computer-to-computer electronic transfer and using EPA-provided software, see the discussion in the preamble to the proposal.

In summary, in addition to supporting regulation development, control strategy development and other air pollution control activities, having an electronic database populated with performance test data will save industry, state, local, tribal agencies and the EPA significant time, money and effort while improving the quality of emission inventories and air quality regulations.

E. Clarifications to the FPUF Production NESHAP

1. What clarifications to the FPUF Production NESHAP were proposed?

The EPA proposed to revise the FPUF Production NESHAP to clarify the leak detection methods allowed for diisocyanate storage vessels at slabstock foam production facilities and to add a schedule for leak repairs of valves and connectors in diisocyanate service that are on a delay of repair schedule.

Specifically, the EPA proposed to clarify the leak detection methods that may be used for diisocyanate storage vessels at slabstock foam production facilities during unloading

events. The current requirements allow the vapor return line to be inspected for leaks during unloading events using visual, audible or any other detection method. The EPA proposed to clarify, that "any other detection method" must be an instrumental detection method.

The EPA also proposed to revise the provisions regarding delay of leak repairs for valves and connectors in diisocyanate service. A delay of repair is currently allowed by the NESHAP if the owner or operator determines that diisocyanate emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from a delay of repair. However, the current provisions for these valves and connectors do not state how long such a delay may last. Under the proposed requirements, the repair must be completed as soon as practicable, but not later than 6 months after the leak is detected.

2. How did the clarifications to the FPUF Production NESHAP change?

We have not changed any aspects of the proposed rule amendments regarding the clarification to diisocyanate storage vessels leak detection methods or the leak delay of repair requirements for valves and connectors in diisocyanate service.

3. What key comments did we receive on the clarifications to the FPUF Production NESHAP, and what are our responses?

No comments were received regarding the clarification to diisocyanate storage vessels leak detection methods, and one comment regarding the diisocyanate equipment leak delay of repair requirements for valves and connectors was received. The following is a summary of this comment and our response.

Comment: One commenter noted that the EPA proposed to allow sources to delay leak repair for 6 months in certain circumstances and stated that this is both an unreasonably long period and that it creates a 6-month exemption from the emission standards. The commenter also asserted that the 15 days allowed for repair under normal conditions is an unlawful exemption from the standard. The commenter contended that the EPA must require leak repair to occur, once detected, within the absolute minimum time needed to end each leak.

Response: EPA did not propose to revise 40 CFR 63.1294(c), the provision that specified when leaks must be repaired under normal conditions, and thus the issue of whether this provision is appropriate is outside the scope of this rulemaking. We disagree, however, that when leaks must be repaired establishes an exemption from the standard. As noted earlier in this preamble, consistent with CAA section 112(h), EPA established an LDAR program as a work practice standard in lieu of setting specific emission limits for equipment leaks. A necessary component of such a program is a requirement that the leaks be

repaired within specified timeframes. The existing rules require that leak repairs be made as soon as practicable, with a first attempt required within 5 calendar days of detection, and the repairs must be completed within 15 calendar days of detection.

As noted in Technology Review and Cost Impacts for the Proposed Amendments to the Flexible Polyurethane Foam Production Source Category, the format for these requirements was based on the requirements of the HON, 40 CFR 63, subpart H. As explained in the proposal preamble for that rule, 57 FR at 62608, these time periods are intended to provide effective emission reduction, while allowing the time necessary for scheduling of more complex repairs.

Regarding the proposed requirement that repairs to components placed on a delay of repair schedule be completed within 6 months, we note that the 1998 FPUF Production NESHAP has no requirement for when repairs must be completed for valves and connectors, while there is a requirement that pumps must be repaired within 6 months. The requirements being finalized today will ensure that repair of leaks at valves and connectors is not delayed beyond 6 months. This requirement is consistent with the existing provision for pumps. We further note that a facility may take up to 6 months to repair a leak only if the facility determines that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely

to result from delay of repair. In other words, a delay of repair is allowed only when the net result is lower emissions.

4. What are our final actions to clarify the FPUF Production NESHAP?

For the reasons provided in above and in the preamble to the proposed rule, the EPA is finalizing the proposed revisions to the FPUF Production NESHAP to clarify that the reference to "any other detection method" for diisocyanate storage vessels leak detection methods means an instrumental detection method. We are furthermore, adding a 6-month maximum timeframe for delay of repairs for diisocyanate equipment leaks from valves and connectors.

V. Summary of Cost, Environmental and Economic Impacts

A. What are the affected facilities?

The facilities affected by this final rule include facilities with new and existing flexible polyurethane foam or rebond foam processes that emit HAP and are located at a plant site that is a major source for HAP emissions. We anticipate that 12 FPUF Production facilities currently operating in the United States will be affected by these final amendments.

B. What are the air quality impacts?

We estimate that the final amendments to the FPUF
Production NESHAP will not result in any directly quantifiable
reduction of actual HAP emissions. However, we estimate that the

MACT-allowable HAP emissions for the FPUF Production source category will be reduced by 735 tpy. We are finalizing requirements to prohibit the use of HAP and HAP-based ABAs at slabstock foam production facilities. As HAP and HAP-based ABAs are no longer used by FPUF Production facilities, no additional emission reductions will be realized as a result of these requirements, although potential increases in emissions in the future will be prevented. We do not expect any emissions impacts due to the final requirements to report performance tests through the ERT.

C. What are the cost impacts?

Under the final amendments, FPUF Production facilities are not expected to incur any costs. However, there may be small cost savings at some facilities due to reduced monitoring and recordkeeping costs. The memorandum, Technology Review and Cost Technology Review and Cost Impacts for the Proposed Amendments to the Flexible Polyurethane Foam Production Source Category includes a complete description of the cost estimate methods prepared during the development of this rule and is available in the docket for this action (EPA-HO-OAR-2012-0510).

Though the cost savings cannot be monetized, consistent with Executive Order 13563, "Improving Regulation and Regulatory Review," issued on January 18, 2011, the electronic reporting requirements being finalized in this action for performance test

reports are expected to reduce the burden for the FPUF

Production facilities in the future by reducing recordkeeping

costs and the costs associated data collection requests, which

may be fewer or less substantial (due to performance test

information being readily available on the EPA's WebFIRE

database).

D. What are the economic impacts?

Since no costs or a small cost savings are expected as a result of the final amendments, there will not be any significant impacts on affected firms or their consumers as a result of this proposal.

As no small firms face significant control costs, this regulation is not expected to have a significant impact on small entities.

E. What are the benefits?

We do not anticipate any significant actual HAP emissions reductions as a result of these final amendments. However, as explained in the air quality impacts section, we are finalizing requirements to prohibit the use of HAP and HAP-based ABAs at slabstock foam production facilities. Because no sources are currently using these ABAs, we expect no additional emission reductions will be realized, although increases in emissions in the future will be prevented. For the final revisions to the FPUF Production NESHAP including changes regarding SSM, the

clarification to the leak detection methods allowed for diisocyanate storage vessels, and the inclusion of a schedule for delay of leak repairs for valves and connectors, these changes may result in fewer emissions during SSM periods, less frequent SSM periods, and fewer emissions from diisocyanate storage vessels and equipment leaks. However, the possible emission reductions are difficult to quantify and are not included in our assessment of health benefits. We do not expect any emissions impacts due to the final requirements to report performance tests through the ERT.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and

Executive Order 13563: Improving Regulation and Regulatory

Review

This action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is, therefore, not subject to review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011).

B. Paperwork Reduction Act

The information collection requirements in the final rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501, et seq. The Information Collection Request (ICR) document prepared by the EPA has been assigned EPA ICR number 1783.07.

The information collection requirements are not enforceable until OMB approves them.

The information requirements in this rulemaking are based on the notification, recordkeeping and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized by CAA section 114 (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to agency policies set forth in 40 CFR part 2, subpart B.

The OMB previously approved the information collection requirements contained in the existing regulation being amended with this final rule (i.e., 40 CFR part 63, subparts III) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, et seq. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. Burden is defined at 5 CFR 1320.3(b).

We estimate approximately 12 regulated entities are currently subject to 40 CFR part 63, subpart III, and will be subject to all final standards. The total annual monitoring, reporting, and recordkeeping burden for this collection (averaged over the first 3 years after the effective date of the

standards) for subpart III (FPUF Production), including today's final amendments, is 882 labor hours per year at a total labor cost of \$46,810 per year, and total non-labor capital and operation and maintenance costs of \$0 per year.

The total burden for the federal government (averaged over the first 3 years after the effective date of the standard) is estimated to be 60 hours per year at a total labor cost of \$3,234 per year. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9. When this ICR is approved by OMB, the agency will publish a technical amendment to 40 CFR part 9 in the Federal Register to display the OMB control number for the approved information collection requirements contained in this final rule.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small

entities include small businesses, small organizations and small governmental jurisdictions.

For purposes of assessing the impacts of this final rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field. According to the SBA small business standards definitions, for the FPUF Production source category, which has the NAICS code of 326150 (i.e., Urethane and Other Foam Product (except Polystyrene) Manufacturing), the SBA small business size standard is 500 employees.

After considering the economic impacts of this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This final rule will not impose any requirements on small entities. Three facilities, or 25 percent of the 12 affected facilities, are small entities. Total annualized costs for the final rule are estimated to be \$0, and no small entities are projected to incur costs. Because HAP ABAs are no longer

used by FPUF Production facilities, there are no impacts on any entities subject to this rulemaking.

D. Unfunded Mandates Reform Act

This rule does not contain a federal mandate that may result in expenditures of \$100 million or more for state, local or tribal governments, in the aggregate, or the private sector in any one year. This final rule is not expected to impact state, local or tribal governments, and FPUF Production facilities are not expected to incur any costs as a result of this final rule. Thus, this rule is not subject to the requirements of sections 202 or 205 of the Unfunded Mandates Reform Act (UMRA).

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. This rule contains no requirements that apply to such governments nor does it impose obligations upon them.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. This action will not impose substantial direct compliance

costs on state or local governments, nor will it preempt state law, and none of the facilities subject to this action are owned or operated by state governments. Thus, Executive Order 13132 does not apply to this action.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). There are no FPUF Production facilities that are within 3 miles of tribal lands. Thus, Executive Order 13175 does not apply to this action. Although Executive Order 13175 does not apply to this action, the EPA solicited comments on this action from tribal officials, but received none.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action will not relax the control measures on existing regulated sources, and the EPA's risk assessments (included in the docket for this action) demonstrate that the

regulation, as amended to include today's final changes, is health protective.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211, (66 FR 28355, May 22, 2001), because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104-113 (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards (VCS) in its regulatory activities, unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards (e.g., materials specifications, test methods, sampling procedures and business practices) that are developed or adopted by VCS bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable VCS.

This action involves technical standards. Therefore, the EPA conducted a search to identify potentially applicable VCS.s. However, we identified no such standards, and none were brought to our attention in comments. Therefore, the EPA has decided to continue to use EPA Method 25A, "Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer,' 40

CFR part 60, Appendix A, to measure organic compound concentrations.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

To gain a better understanding of the FPUF Production source category and near-source populations, the EPA conducted a proximity analysis at a study area of 3 miles of the facilities in the source category prior to the November 2013 proposal, and revised the analysis for this final rulemaking. This analysis identifies, on a limited basis, the subpopulations that may be exposed to air pollution from the regulated sources, and thus, are expected to benefit most from this regulation. The analysis does not quantify the level of risk faced by those individuals or communities. The revised proximity analysis shows that most

demographic categories are within 20 percent of their corresponding national averages, except for the African American population, which exceeds the national average by 53 percent (19 percent versus 13 percent). To the extent that any minority, low-income or indigenous subpopulation is disproportionately impacted by hazardous air pollutant emissions due to the proximity of their homes to sources of these emissions, that subpopulation also stands to see increased environmental and health benefits from the emission reductions called for by this rule. The revised proximity analysis results are presented in the July 2014 memorandum titled, Final Environmental Justice Review: Flexible Polyurethane Foam Production, a copy of which is available in the docket for this action (EPA-HQ-OAR-2012-0510).

The EPA has determined that the current health risks posed by emissions from the FPUF production source category are acceptable and, along with the existing NESHAP, as modified to include the HAP and HAP-based ABA prohibition that we are finalizing today, provide an ample margin of safety to protect public health and prevent adverse environmental effects.

Additionally, the final changes to the standard increase the level of environmental protection for all affected populations by ensuring no future emissions increases from the source category.

K. Congressional Review Act

U.S.C. 801, et seq., as added by the Small Business

Regulatory Enforcement Fairness Act of 1996, generally provides

that, before a rule may take effect, the agency promulgating the

rule must submit a rule report, which includes a copy of the

rule, to each House of the Congress and to the Comptroller

General of the United States. The EPA will submit a report

containing this final rule and other required information to the

United States Senate, the United States House of Representatives

and the Comptroller General of the United States prior to

publication of the final rule in the Federal Register. A major

rule cannot take effect until 60 days after it is published in

the Federal Register. This action is not a "major rule" as

defined by 5 U.S.C. 804(2). This rule will be effective on

[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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List of Subjects for 40 CFR Part 63

Environmental protection, Administrative practice and

procedures, Air pollution control, Hazardous substances,

Intergovernmental relations, Reporting and recordkeeping

requirements.

Dated: July 29, 2014.

Gina McCarthy,

Administrator.

For the reasons stated in the preamble, the Environmental Protection agency is amending title 40, chapter I, of the Code of Federal Regulations as follows:

PART 63-[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart III - National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production

2. Section 63.1290 is amended by revising paragraph (c) and adding paragraph (d) to read as follows:

§ 63.1290 Applicability.

* * * * *

- (c) A process meeting one of the following criteria listed in paragraphs (c)(1) and (2) of this section shall not be subject to the provisions of this subpart:
- (1) A process exclusively dedicated to the fabrication of flexible polyurethane foam; or
 - (2) A research and development process.
- (d) Applicability of this subpart. (1) The emission limitations set forth in this subpart and the emission limitations referred to in this subpart shall apply at all times except during periods of non-operation of the affected source

(or specific portion thereof) resulting in cessation of the emissions to which this subpart applies.

- (2) Equipment leak requirements of § 63.1294 shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which the equipment leak requirements apply.
- (3) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with this subpart during times when emissions are being routed to such items of equipment if the shutdown would contravene requirements of this subpart applicable to such items of equipment.
- (4) General duty. At all times, the owner or operator shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance

procedures, review of operation and maintenance records, and inspection of the source.

3. Section 63.1291 is amended by revising paragraph (a) to read as follows:

§ 63.1291 Compliance schedule.

(a) Existing affected sources shall be in compliance with all provisions of this subpart no later than October 8, 2001, with the exception of § 63.1297. Affected sources subject to the requirements of § 63.1297 shall be in compliance with the requirements of this section on or before [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

* * * * *

- 4. Section 63.1292 is amended by:
- a. Revising the definitions for "HAP-based," "Reconstructed source," "Storage vessel" and "Transfer pump"; and
- b. Removing the definitions for "High-pressure mixhead,"
 "Indentation Force Deflection (IFD)," "In HAP ABA service,"
 "Recovery device," "Run of foam," and "Transfer vehicle".

The revisions read as follows:

§ 63.1292 Definitions.

* * * * *

<u>HAP-based</u> means to contain 5 percent (by weight) or more of HAP. This applies to equipment cleaners, mixhead flushes, mold release agents and ABA.

* * * * *

Reconstructed source means an affected source undergoing reconstruction, as defined in subpart A of this part. For the purposes of this subpart, process modifications made to stop using HAP ABA or HAP-based ABA to meet the requirements of this subpart shall not be counted in determining whether or not a change or replacement meets the definition of reconstruction.

* * * * *

Storage vessel means a tank or other vessel that is used to store diisocyanates for use in the production of flexible polyurethane foam. Storage vessels do not include vessels with capacities smaller than 38 cubic meters (or 10,000 gallons).

Transfer pump means all pumps used to transport diisocyanates that are not metering pumps.

5. Section 63.1293 is revised to read as follows:

§ 63.1293 Standards for slabstock flexible polyurethane foam production.

Each owner or operator of a new or existing slabstock affected source shall comply with §§ 63.1294, 63.1297, and 63.1298.

6. Section 63.1294 is amended by revising paragraphs
(a)(1)(i), (c), and (d)(2)(ii), and by adding paragraph
(d)(2)(iii) to read as follows:

§ 63.1294 Standards for slabstock flexible polyurethane foam production—diisocyanate emissions.

- (a) * * *
- (1) * * *
- (i) During each unloading event, the vapor return line shall be inspected for leaks by visual, audible, or an instrumental detection method.

* * * * *

- (c) Other components in diisocyanate service. If evidence of a leak is found by visual, audible, or an instrumental detection method, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in paragraph (d) of this section. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
 - (d) * * *
 - (2) * * *
- (ii) The purged material is collected and destroyed or recovered in a control device when repair procedures are effected, and
- (iii) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

* * * * *

§ 63.1295 [Removed and Reserved]

7. Remove and reserve § 63.1295.

§ 63.1296 [Removed and Reserved]

- 8. Remove and reserve § 63.1296.
- 9. Revise § 63.1297 to read as follows:

§ 63.1297 Standards for slabstock flexible polyurethane foam production - HAP ABA.

Each owner or operator of a new or existing slabstock affected source shall not use HAP or a HAP-based material as an ABA.

10. Revise § 63.1298 to read as follows:

§ 63.1298 Standards for slabstock flexible polyurethane foam production - HAP emissions from equipment cleaning.

Each owner or operator of a new or existing slabstock affected source shall not use HAP or a HAP-based material as an equipment cleaner.

§ 63.1299 [Removed and Reserved]

- 11. Remove and reserve § 63.1299.
- 12. Revise § 63.1302 to read as follows:

§ 63.1302 Applicability of subpart A requirements.

The owner or operator of an affected source shall comply with the applicable requirements of subpart A of this part, as specified in Table 1 of this subpart.

- 13. Section 63.1303 is amended by:
- a. Revising paragraph (a) introductory text;

- b. Removing paragraphs (a)(3) and (a)(4);
- c. Revising paragraph (b); and
- d. Removing paragraphs (c), (d) and (e).

The revisions read as follows:

§ 63.1303 Monitoring requirements.

* * * * *

(a) Monitoring requirements for storage vessel carbon adsorption systems. Each owner or operator using a carbon adsorption system to meet the requirements of § 63.1294(a) shall monitor the concentration level of the HAP or the organic compounds in the exhaust vent stream (or outlet stream exhaust) from the carbon adsorption system at the frequency specified in paragraph (a)(1) or (2) of this section.

* * * * *

(b) Each owner or operator using a carbon adsorption system to meet the requirements of § 63.1294(a) shall monitor the concentration level of total organic compounds in the exhaust vent stream (or outlet stream exhaust) from the carbon adsorption system using 40 CFR part 60, Appendix A, Method 25A, reported as propane. The measurement shall be conducted over at least one 5-minute interval during which the storage vessel is being filled.

§ 63.1304 [Removed and Reserved]

14. Remove and reserve § 63.1304.

- 15. Section 63.1306 is amended by:
- a. Removing paragraph (c);
- b. Redesigating paragraphs (d) and (e) as paragraphs (c)
 and (d);
- c. Revising newly redesignated paragraphs (c) introductory text and (c)(3);
 - d. Revising newly redesignated paragraph (d);
 - e. Revising paragraph (f);
 - f. Redesignating paragraph (g) as paragraph (e);
- g. Revising newly redesignated paragraphs (e)(1) and (2); and
 - h. Adding a new paragraph (g).

The addition and revisions read as follows:

§ 63.1306 Reporting requirements.

* * * * *

(c) Notification of compliance status. Each affected source shall submit a notification of compliance status report no later than 180 days after the compliance date. For slabstock affected sources, this report shall contain the information listed in paragraphs (c)(1) through (3) of this section, as applicable. This report shall contain the information listed in paragraph (c)(4) of this section for molded foam processes and in paragraph (c)(5) of this section for rebond foam processes.

(3) A statement that the slabstock foam affected source is in compliance with §§ 63.1297 and 63.1298, or a statement that slabstock foam processes at an affected source are in compliance with §§ 63.1297 and 63.1298.

- (d) <u>Semiannual reports</u>. Each slabstock affected source shall submit a report containing the information specified in paragraphs (d)(1) through (3) of this section semiannually no later than 60 days after the end of each 180 day period. The first report shall be submitted no later than 240 days after the date that the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date that the Notification of Compliance Status Report is due.
- (1) For sources complying with the storage vessel provisions of § 63.1294(a) using a carbon adsorption system, unloading events that occurred after breakthrough was detected and before the carbon was replaced.
- (2) Any equipment leaks that were not repaired in accordance with §§ 63.1294(b)(2)(iii) and 63.1294(c).
- (3) Any leaks in vapor return lines that were not repaired in accordance with § 63.1294(a)(1)(ii).
 - (e) * * *

- (1) The compliance certification shall be based on information consistent with that contained in § 63.1308, as applicable.
- (2) A compliance certification required pursuant to a state or local operating permit program may be used to satisfy the requirements of this section, provided that the compliance certification is based on information consistent with that contained in § 63.1308, and provided that the Administrator has approved the state or local operating permit program under part 70 of this chapter.

- (f) Malfunction reports. If a source fails to meet an applicable standard, slabstock affected sources shall report such events in the next semiannual report and molded and rebond affected sources shall report such events in the next annual compliance certification. Report the number of failures to meet an applicable standard. For each instance, report the date, time and duration of each failure. For each failure, the report shall include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions.
- (g) Within 60 days after the date of completing each performance test (as defined in § 63.2) required by this

subpart, you shall submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either paragraph (g)(1) or (g)(2) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (http://www.epa.gov/ttn/chief/ert/index.html), , the owner or operator shall submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (http://cdx.epa.gov/epa home.asp). Performance test data shall be submitted in a file format generated through the use of the EPA's ERT. Alternatively, the owner or operator may submit performance test data in an electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website, once the XML schema is available. Owners or operators, who claim that some of the information being submitted for performance tests is confidential business information (CBI), shall submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office,

Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

- (2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13.
 - 16. Section 63.1307 is amended by:
- a. Removing paragraph (a) (2) and redesignating paragraphs(a) (3) and (4) as paragraphs (a) (2) and (3), respectively;
- b. Revising the newly redesignated paragraphs (a) (2) introductory text, (a) (2) (ii), and (a) (3) introductory text;
 - c. Revising paragraph (b)(1);
- d. Revising paragraphs (b)(3) introductory text, (b)(3)(i)
 introductory text and (b)(3)(i)(B);
 - e. Removing paragraph (b)(3)(i)(C);
- f. Revising paragraphs (b)(3)(ii) introductory text and
 (b)(3)(ii)(A);
 - q. Removing paragraph (b)(3)(ii)(D);
- h. Redesignating paragraphs (b)(3)(ii)(E) through (H) as(b)(3)(ii)(D) through (G);
 - i. Revising paragraph (c);

- j. Removing paragraph (d);
- k. Redesignating paragraphs (e) through (h) as (d) through(q);
 - 1. Revising newly redesignated paragraph (e); and
 - m. Adding new paragraph (h).

The additions and revisions read as follows:

§ 63.1307 Recordkeeping requirements.

* * * * *

- (a) * * *
- (2) For storage vessels complying through the use of a carbon adsorption system, paragraphs (a)(2)(i) or (ii), and paragraph (a)(2)(iii) of this section.

* * * *

(ii) For affected sources monitoring at an interval no greater than 20 percent of the carbon replacement interval, in accordance with § 63.1303(a)(2), the records listed in paragraphs (a)(2)(ii)(A) and (B) of this section.

* * * * *

(3) For storage vessels complying through the use of a vapor return line, paragraphs (a)(3)(i) through (iii) of this section.

- (b) * * *
- (1) A list of components in diisocyanate service.

* * * * *

- (3) When a leak is detected as specified in §§
 63.1294(b)(2)(ii) and 63.1294(c), the requirements listed in paragraphs (b)(3)(i) and (ii) of this section apply:
- (i) Leaking equipment shall be identified in accordance with the requirements in paragraphs (b)(3)(i)(A) and (B) of this section.

* * * * *

- (B) The identification on equipment may be removed after it has been repaired.
- (ii) The information in paragraphs (b)(2)(ii)(A) through(G) shall be recorded for leaking components.
- (A) The operator identification number and the equipment identification number.

* * * * *

(c) The owner or operator of an affected source subject to § 63.1297 shall maintain a product data sheet for each ABA used which includes the HAP content, in kg of HAP/kg solids (lb HAP/lb solids).

* * * * *

(e) The owner or operator of an affected source following the compliance methods in § 63.1308(b)(1) shall maintain records of each use of a vapor return line during unloading, of any

leaks detected during unloading, and of repairs of leaks detected during unloading.

- (h) Malfunction records. Records shall be kept as specified in paragraphs (h)(1) through (3) of this section for affected sources. Records are not required for emission points that do not require control under this subpart.
- (1) In the event that an affected unit fails to meet an applicable standard, record the number of failures. For each failure, record the date, time and duration of the failure.
- (2) For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
- (3) Record actions taken to minimize emissions in accordance with § 63.1290(d) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
 - 17. Section 63.1308 is amended by:
 - a. Revising paragraph (a) introductory text;
 - b. Revising paragraphs (b)(3), (b)(6), and (c);
 - c. Removing paragraph (d); and
 - d. Redesignating paragraph (e) as (d).

The revisions read as follows:

§ 63.1308 Compliance demonstrations.

(a) For each affected source, compliance with the requirements described in Tables 2 and 3 of this subpart shall mean compliance with the requirements contained in §§ 63.1293 through 63.1301, absent any credible evidence to the contrary.

* * * * *

- (b) * * *
- (3) For each affected source complying with § 63.1294(a) in accordance with § 63.1294(a) (2) through the alternative monitoring procedures in § 63.1303(a) (2), each unloading event that the diisocyanate storage vessel is not equipped with a carbon adsorption system, each time that the carbon adsorption system is not monitored for breakthrough in accordance with § 63.1303(b)(1) or (2) at the interval established in the design analysis, and each unloading event that occurs when the carbon is not replaced after an indication of breakthrough;

* * * * *

(6) For each affected source complying with § 63.1294(c), each calendar day after 5 calendar days after detection of a leak that a first attempt at repair has not been made, and the earlier of each calendar day after 15 calendar days after detection of a leak that a leak is not repaired, or if a leak is not repaired as soon as practicable, each subsequent calendar

day (with the exception of situations meeting the criteria of § 63.1294(d)).

- (c) <u>Slabstock affected sources.</u> For slabstock foam affected sources, failure to meet the requirements contained in §§ 63.1297 and 63.1298, respectively, shall be considered a violation of this subpart. Violation of each item listed in the following paragraphs shall be considered a separate violation.
- (1) For each slabstock foam affected source subject to the provisions in § 63.1297, each calendar day that a HAP ABA or HAP-based material is used as an ABA;
- (2) For each slabstock foam affected source subject to the provisions of § 63.1298, each calendar day that a HAP-based material is used as an equipment cleaner.

* * * * *

§ 63.1309 [Amended]

18. Section 63.1309 is amended by removing paragraph (b)(4) and redesignating paragraph (b)(5) as (b)(4).

Table 1 to Subpart III of Part 63 [Removed]

19. Remove Table 1 to Subpart III of part 63.

Table 2 to Subpart III of Part 63 [Redesignated as Table 1 to Subpart III of Part 63]

20. Redesignate Table 2 to Subpart III of Part 63 as Table 1 to Subpart III of Part 63 and amend newly redesignated Table 1 by:

- a. Revising the heading;
- b. Removing entry § 63.6(e)(1)-(2);
- c. Adding entries § 63.6(e)(1)(i), § 63.6(e)(1)(ii), and §
 63.6(e)(1)(iii);
 - d. Removing entry § 63.6(e)(3);
 - e. Adding entry § 63.6(e)(2)-(3):
 - f. Removing entry § 63.6(f)-(g);
- g. Adding entries § 63.6(f)(1), § 63.6(f)(2)-(3), and § 63.6(g);
 - h. Removing entry § 63.10(a)-(b);
 - i. Adding entries § 63.10(a), § 63.10(b)(1), §
- 63.10(b)(2)(i), § 63.10(b)(2)(ii), § 63.10(b)(2)(iii), §
- 63.10(b)(2)(iv)-(xi), § 63.10(b)(2)(xii), § 63.10(b)(2)(xiii), §
- 63.10(b)(2)(xiv), and § 63.10(b)(3);
 - j. Removing entry § 63.10(d)(4)-(5); and
 - k. Adding entries § 63.10(d)(4) and § 63.10(d)(5).

The revision and additions read as follows:

Table 1 to Subpart III of Part 63-Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart III

Subpart		Applies to subpart III				
*	*	*	*	*	*	*
§ 63.6(e)(1)(i)		See § 63 requirem		for general	duty
§ 63.6(e)(1)(ii)	NO				

_		1	T			
§	63.6(e)(1)(iii)	YES				
§	63.6(e)(2)-(3)	NO				
§	63.6(f)(1)	NO				
© 3	63.6(f)(2)-(3)	YES				
© 3	63.6(g)	YES				
	* *	*	*	*	*	*
§	63.10(a)	YES				
§	63.10(b)(1)	YES				
S	63.10(b)(2)(i)	NO				
623	63.10(b)(2)(ii)	NO	See § 63.1307(h) for recordkeeping of (1) date, time and duration; (2) listing of affected source or equipment and an estimate of the volume of each regulated pollutant emitted over the standard; and (3) actions to minimize emissions and any actions taken at the discretion of the owner or operator to prevent recurrence of the failure to meet an applicable requirement.			
§	63.10(b)(2)(iii)	YES				
	63.10(b)(2)(iv)- ci)	NO				
§	63.10(b)(2)(xii)	YES				
§	63.10(b)(2)(xiii)	NO				
§	63.10(b)(2)(xiv)	YES				
§	63.10(b)(3)	YES				
	* *	*	*	*	*	*
§	63.10(d)(4)	YES				
<u>@</u>	63.10(d)(5)	NO	See § 63.1306(f) for malfunction reporting requirements.			
	* *	*	*	*	*	*

Table 3 to Subpart III of Part 63 [Redesignated as Table 2 to Subpart III of Part 63]

- 21. Redesignate Table 3 to Subpart III of Part 63 as Table 2 to Subpart III of Part 63 and amend newly redesignated Table 2 by:
 - a. Revising the heading;
- b. Removing entries for HAP ABA storage vessels § 63.1295,
 HAP ABA pumps § 63.1296(a), HAP ABA valves § 63.1296(b), HAP ABA
 connectors § 63.1296(c), Pressure relief devices § 63.1296(d),
 Open-ended valves or lines § 63.1296(e), and Production line §
 63.1297; and
 - c. Adding an entry for ABAs § 63.1297.

The revision and addition read as follows:

Table 2 to Subpart III of Part 63-Compliance Requirements for Slabstock Foam Production Affected Sources

Emission	Emission	Emission,	Monitorin	Recordkeepin	Reporti
Point	point compliance option	work practice, and equipment standards	g	g	ng
*	*	* :	* *	*	*
ABAs §	N/A	§ 63.1297		§ 63.1307(e)	
63.1297					

Table 4 to Subpart III of Part 63 [Removed]

22. Remove Table 4 to Subpart III of Part 63.

Table 5 to Subpart III of Part 63 [Redesignated as Table 3 to Subpart III of Part 63]

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23. Redesignate Table 5 to Subpart III of Part 63 as Table 3 to Subpart III of Part 63 and amend newly redesignated Table 3 by revising the heading to read as follows:

Table 3 to Subpart III of Part 63-Compliance Requirements for Molded and Rebond Foam Production Affected Sources

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